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ABSTRACT

Stress is a part of everyday life for adolescents with puberty as stress affecting sixth grade students (N=27) was addressed in a junior high school with a program designed to reduce stress through problem solving. Two evaluation devices, the Barksdale Stress Evaluation and the "My Stress Level" Test were used for pre- and post-test comparison. In the program, students were introduced to the concept of stress, were taught how to recognize it, and were trained to combat it through problem solving techniques. The program was implemented in a 12-week period. Evaluation of the pre- and post-test results indicated that long-term stress levels decreased but short-term stress levels increased. Attitudinal changes within the group were noted as well. It was concluded that problem solving as a stress reduction technique is helpful at the sixth grade level. (Appendices include surveys, stress evaluation instruments, progress evaluations, sample problem solving exercises, student worksheets, and teacher evaluations.) (Author/ABL)

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A PROBLEM SOLVING PROGRAM TO AID STRESS REDUCTION IN SIXTH GRADE STUDENTS

by

JANICE M. HORTON

A Practicum Report

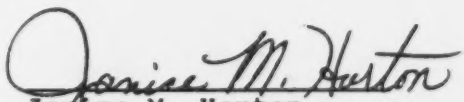
submitted to the Faculty of the Center for the Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

The abstract of this report may be placed in a National Database System for reference.

June/1990

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my work, presented here, will earn similar respect.



Janice M. Horton

ABSTRACT

A Problem Solving Program To Aid Stress Reduction In Sixth Grade Students.
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Descriptors: Elementary Education/ Adolescent Stress/ Peer Pressure/ Educational Stress/ Family Stress/ Stress Reduction Through Problem Solving/ Adolescent Stress Testing/ Adolescent Stress Reduction/

High stress which affects sixth grade students was addressed by a program designed to reduce stress through problem solving. Two evaluation devices, the Barksdale Stress Evaluation and the "My Stress Level" Test were used for pre-and-post comparisons. Students were introduced to the concept of stress, were taught to recognize it, and were trained to combat it through problem solving techniques. The results, as indicated by pre-and-post testing, showed decreased long-term but increased short-term stress levels within the target group. Attitudinal changes within the group were noted as well. It was concluded that problem solving as a stress reduction technique is helpful at the sixth grade level. Appendices include surveys, stress evaluations, progress evaluations, sample problem solving exercises, student worksheets, and teacher evaluations.

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Practicum Title A PROBLEM SOLVING PROGRAM TO AID STRESS REDUCTION IN SIXTH GRADE STUDENTS

Student's Name Janice M. Horton

Program Site Henderson, Nevada Date June 1990

Observer's Name Frank Lamping Frank J. Lamping
(please print-------and sign)

Observer's position Principal Phone #702 799-8080

Observer's comment on impact of the project (handwritten):

I did enjoy this classroom visit - I saw student working together (1) they reviewed the definition of stress - (as D.A.S.) (2) the four steps in problem solving to reduce stress - Students did enjoy this exercise - Teacher does well into this lesson - I ask that she share this program with other teachers - Well done! P.I.
Student work sheets were used - I saw a lot of team work -

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CHAPTER I

Purpose

The setting for this project is the nation's 19th largest school district, located in the southwestern part of the United States. This district consists of 91 elementary schools, 19 junior high schools, 18 senior high schools, and eight sixth-grade centers. At present, it serves more than 110,000 students and is projecting an enrollment of 160,000 by the year 2000.

The junior high school in which this study was conducted is located in a middle to upper-middle class area. There are many single parent families and in the homes with two parents, both are likely to hold jobs. The local economy is based on adult tourism which operates on a 24-hour schedule. The nature of the jobs in the area may require parents to be absent from the home at any time of day. Recent national surveys have shown this area to be one of the highest in the country for adult stress levels. According to Humphrey and Humphrey, (1985:V),

> This becomes all the more important because it has now been clearly demonstrated that children who associate with adults who are under stress, are very likely to become stress ridden themselves.

The target school has an average daily attendance of 1,211 students. Of the 1,211 students, 386 are sixth graders, 363 are seventh graders, 385 are eighth graders, and 77 are enrolled in special education programs. The ethnic distribution of the school's population is 90 percent Caucasian, 1.8 percent Black, 4.8 percent Hispanic, 2.0 percent Asian or Pacific Islander, 0.9 percent American Indian, and 0.5 percent other.

There are 46 teachers, five teacher aides, five secretaries, two counselors, one dean, one principal, and one vice-principal. In addition, a psychologist, a nurse, and a speech therapist are available to the school on a part-time basis. The student-teacher ratio is 26:1.

The writer is a sixth grade English teacher in the target school. This position has been held for four years. Sponsoring and organizing social and academic activities provides opportunities to interact with students in a non-academic capacity.

The author is responsible for 27 sixth grade students in a Teacher Advisory (T.A.) class, basically a homeroom. The informal structure of the T.A. provides opportunity to observe students' reactions to everyday problems. An open door policy fosters an atmosphere conducive to free and open expression. The T.A. class is the target group for a study of stress reduction in sixth grade students through the use of problem solving.

Problem Statement

Entry-level (sixth grade) junior high school students function under high stress. Webster (1976) defines stress as "a state of bodily or mental tension resulting from factors that tend to alter an existing equilibrium." Authorities agree that there are two elements of stress; having a problem and being unable to solve that problem. High stress in sixth grade students is evidenced by rebellion against authority, peer conflicts, and poor academic performance. Generally an absence of long-term goals has also been observed.

Various authors have theorized about the causes of student stress. Suggested causes include puberty and the move from an elementary to a junior high learning environment. The consensus of opinion is that junior high students function under tremendous stress. A reduction of stress would allow students to concentrate on bettering themselves academically and socially.

The author discussed the effect of stress on students with other sixth grade teachers. All agreed that stress hinders social and academic progress for students. Each teacher felt it would be advantageous to reduce student stress.

Twenty-seven sixth grade teachers at the target school were surveyed (Appendix A:35). The instructors were asked for their opinions on stress-related symptoms in sixth grade students and if they considered it important to reduce student stress. Twenty-four teachers responded. Twenty-two had taught at other grade levels. Of the twenty-two who had taught at other grade levels, 19 felt that such stress indicators as rebellion, social problems, and low academic achievement were

more obvious in sixth grade students than in other grades. Overall, 79 percent of the respondents reported that sixth grade students function under higher levels of stress than pupils in either higher or lower grades. One hundred percent of the respondents believed that sixth grade students would benefit academically and socially from a reduction in stress.

The Barksdale Stress Evaluation, administered to the target group of students, indicated that 30 percent had sufficient stress to cause "serious emotional problems, a definite threat to your health." Fifty-nine percent were diagnosed as having a "severe handicap to emotional and physical well-being." Seven percent were described as having a "definite handicap to emotional well-being", and only four percent exhibited normal stress (Appendix B:37). The "My Stress Level" Test was also administered to the target group (Appendix C: 39). This test indicated that 88 percent of the students in the target group function at a medium to high level of stress. Results from the two tests indicated that approximately 90 percent of the

target students had serious stress problems which were either a "threat to mental and physical health" or a "severe handicap." The purpose of this project was to reduce the stress level of the target students through the use of problem solving as measured by the readministration of the Barksdale Stress Evaluation Test and the "My Stress Level" Test.

Outcome Objectives

The writer instructs sixth grade students and has noted the stress under which they function. The author's school has no program for stress management. Stress is a problem for the target group, a 27 student, sixth grade T.A. class. At the conclusion of this project the following objectives will have been attained:

1. After one week of instruction on the concept of stress, 100 percent of the target group participating in the stress reduction through problem solving study will be able to compose a definition of stress to include the two elements, having a problem and being unable to solve that

problem. Improvement will be measured by the administration and comparison of a pre-and-post test (Appendix D:41).

2. At the conclusion of week two, 100 percent of the target group participating in the stress reduction through problem solving study will be able to list the four steps to problem solving as defined by Reikes-Ackerly (1980) in the correct order on a written test. Improvement will be measured by the administration of a pre-and-post test (Appendix E:43).

3. At the conclusion of week 12, 80 percent of the target group participating in the stress reduction through problem solving study will be able to apply Reikes-Ackerly's (1980) steps in problem solving to teacher assigned stressful situations (Appendix F:45). Improvement will be measured by a subjective judgement of pre-and-post problem solving exercises performed by students on student worksheets (Appendix H:52). Teacher Evaluation Forms (Appendix I:54) will be used by the teacher to measure overall performance.

4. The target group participating in the stress reduction through problem solving study has been tested using the Barksdale Stress Evaluation. Eighty-nine percent of the students were shown to have stress levels considered hazardous or harmful to physical and mental health. The target group was also administered the "My Stress Level" Test. Results indicated that 15 percent of the students are under a very high level of stress. After a 12 week period of instruction and practice in the use of problem solving as a stress management tool, 50 percent or less of the target students will have stress levels considered hazardous or harmful to physical and mental health as measured by the readministration of the Barksdale Stress Evaluation (Appendix B:37) and that zero percent will have high stress levels as measured by the "My Stress Level" Test (Appendix C:39).

CHAPTER II

Research and Solution Strategy

Stress is a part of everyday life for adolescents. Stress, according to Webster (1976), is "a state of bodily or mental tension resulting from factors that tend to alter an existing equilibrium." There are two distinct components of stress; a perceived problem and an inability to cope. Hans Selye, generally described as the "father of stress", described it as the "nonspecific response of the body to any demand made upon it" (Humphrey and Humphrey 1985:4). According to King, Stanley, and Burrows,

> An understanding of stress should include the idea that stress is a state of unacceptable divergence between perceived demands and capabilities to adapt. More briefly, but perhaps just as accurately; stress arises from doubts about coping (King, Stanley, and Burrows 1987:4).

Fuhrmann believes that modern adolescents deal with incredible stress. He states:

> Children today are pressured to achieve, succeed, please others, hurry and grow up; and they are threatened by the fear of failure, all of which create incredible stress and force them to take on adult roles before they are psychologically mature enough to deal with them (Fuhrmann 1986:48).

Puberty is possibly the most influential stressor of the adolescent. Gullotta said:

> In the span of a few years, the young person changes outwardly from a child to an adult. Mood, affect, or interest in the young adolescent is... capable of soaring to the heights or crashing to the ground. Concern over physical appearance emerges during this time and continues throughout adolescence... to be of tremendous concern to young people (Gullotta 1983:151).

Blythe (1981:3-4) theorizes three reasons for pubescent stress. First, puberty causes changes, and change is always stressful. Puberty also causes appearance alterations in the transition from child to adult. Secondly, this change from child to adult brings about a perceived change in status. Though this is a positive change, it also has its own stressor, role confusion. The adolescent must decide to respond either as a child or adult in any given situation. Lastly, Blythe found that the changes brought about by puberty will most heavily impact two distinct minorities, early developers and late developers. Anything which causes an adolescent to be set apart from peers is a great source of stress.

Another source of stress for adolescents is confusion in self-concept. According to Fenzel:

> Children and adolescents, like adults, actively engage in many social roles. Perhaps the most salient of these roles is that of student. Expectations for behaviors associated with the student role are held by teachers, parents, school administrators and other school personnel and classmates. To the extent that these expectations conflict with one another or differ from the developing person's attitudes, capabilities, beliefs, and developmental needs, the young person is expected to experience strain and resulting problematic behavior and attitudinal outcomes (Fenzel 1984:4 quoting Bronfenbrenner, 1979; Cooper and Ayers-Lopez, 1985; Fenzel, 1988; Metz, 1978).

Adolescents are involved in a struggle between psychological influences and a demanding social world, altering dramatically the adolescent's self-concept. Further, "Self-esteem reaches an all-time low, fluctuating from one moment to another during these stressful years" (Savin-Williams and Demo 1984:1100).

Peer groups are of increasing importance to the adolescent and contribute to adolescent stress. The primary influence of peer groups seems to be in the area of acceptance, approval, and mutual support, rather than in any acceptance of peer group standards. "Peer groups are... important for

teenagers. Beginning in early adolescent years, peers become increasingly important in... decision making,..." (Ianni 1989:677).

Gullotta states:

> Role confusion and wavering self-esteem manifests itself in an increasing preoccupation with self in the young adolescent... Common beliefs among many teenagers are that they are being evaluated by those around them. It has only been in the latter half of this century that the peer group has emerged as the primary influence on the lives of young people. Where in past times the identity of young adolescents was shaped by their relationships with adults, it is from peer relationships that today's young people gain a sense of who they are (Gullotta 1983:152).

Small, Eastman, and Cornelius (1988:378) cite several factors which seem to come into play during adolescence which strain family relationships. First, transformations in emotional attachments between parents and adolescents contribute to stress. The child begins to shift emotional attachment from parents to peers. A second factor is the growth of peer influences and decreased reliance on parental advice. Several studies show that on social issues, adolescents are more likely to follow the advice of their peers than that of their parents. Also, the child is attempting to

become self-reliant and the speed at which adolescent autonomy is accomplished may be a source of intense disagreement within the family.

Small, Eastman, and Cornelius further state that adolescents' experimentation with deviant behavior may also heighten stress. They say that: "Increases in drug, alcohol, and tobacco use, and the incidence of criminal behavior, are common during adolescence in contemporary American society." (Small, Eastman, and Cornelius 1988:379 quoting Gold and Petrino, 1980.)

> Not only is the early adolescent changing, but American society and families are changing rapidly too. Specific trends which affect early adolescent development are:
> -The increase in the number and percentage of households in which all adults are employed outside the home.
> -The increase in divorced parent, single parent, and remarried parent households.
> -Smaller numbers of children in families.
> -Wide expansion of electronic media.
> -Less human labor needed in the home.
> -Widening opportunities in education.
> -Increasing availability of leisure time activities.
> -Delayed entrance into full-time employment.
> -Increased family mobility.
> Because of these trends, early adolescents and families have more decisions to make than ever before (Keith and Hoopfer 1983:2).

Gullotta (1983:152) believes that the change in the relationship between education and the adolescent causes stress. The adolescent suddenly changes to a rotating classroom, several-teacher system, deemphasizing the teacher-student relationship and placing a premium on the acquisition of knowledge.

Omizo, Omizo, and Suzuki (1988:271) cite studies revealing stressors in adolescents related to not feeling or being in control over important things in their lives. Some of the difficulties related to the different structure of the intermediate school.

Chandler summarizes the plight of the adolescent by saying that:

> While adults have many resources to draw upon in coping with stress, the options available to the child are much more limited. Children are limited by their level of language and cognitive development. They have fewer life experiences upon which to draw and thus have a more restricted repertoire of possible responses. While adults are capable of increasing their tolerance to stress because of their reasoning abilities, children, lacking those abilities fail to see the long-term payoffs and are less likely to tolerate stress in the immediate situation. Thus, developmental considerations serve to restrict the responses available to children.

> Added to these developmental limitations are a number of realistic restraints, such as a lack of mobility, financial and personal dependence on the family and significant adults. All of these serve to limit their freedom to act in dealing with stress. An adult who finds himself in a stressful job situation may seek to modify his duties, change jobs, transfer, resign, or relocate. A child who experiences school as a stressful situation may have few options.
>
> The effectiveness of children's efforts to cope varies widely. Some efforts are clearly ineffective and even counterproductive. These extreme maladaptive responses are likely to get children into trouble and thus add another set of stressors with which they will have to cope.
>
> In short, the behavior they show as they attempt to cope with stress causes further problems for them, and so they get trapped in a vicious cycle, as their responses become even more extreme (Chandler 1985:4-5).

Feindler and Ecton (1986:2) believed that although there are a variety of prevalent adolescent behavior problems, the most critical areas for intervention are those of anger and aggression. Their study, based on controlling anger and the resulting aggressive behavior, treats symptoms of stress rather than causes.

Girdano and Everly (1986) assert that nutrition is a factor to be considered in stress reduction. Control of an individual's diet,

however, is a private concern, one not easily monitored or controlled in other than an institutional setting.

Klarreich (1988) discredits other popular "stress management" techniques such as self-hypnosis, which is short-term, and "positive thinking", which sounds good but actually increases stress. He contends the only effective procedure for counteracting stress is an organized, logical, frontal attack on the problem causing stress. Brenner decided that:

> Strategies which enable children to go on with their lives without confronting the cause of tension are generally thought to be more useful in the short term. Adaptations which acknowledge and accept the stress are usually deemed to be healthy over the long term (Brenner 1984:5).

This further reinforces the belief that facing the problem is the most productive approach. Brenner further recommends removing at least one stressor, teaching new coping strategies, and transferring the new learned strategies to other life situations.

McKay, Davis, and Fanning concluded that:

> Problem solving is effective for reducing anxiety associated with procrastination and the inability to make decisions. It is useful

> for relieving the feelings of powerlessness or anger associated with chronic problems for which no alternative solution has been found. Problem solving techniques can be put into effect the same day they are learned. After several weeks of practice, applying the steps become largely automatic (McKay, Davis, and Fanning 1983:60).

The opinion of Chandler (1985:v) says further that the teacher is also a significant adult in the children's lives and as such, contributes to helping children cope more effectively.

An effective method of stress reduction among sixth grade students is to teach them to be better at problem solving. Problem solving can be applied to virtually any problem; personal, academic, or interpersonal. If adolescents learn to apply problem solving to their stress-related problem, stress management should be simpler. A lowering of the level of measurable stress on the target group will result from teaching the students to understand and apply the steps of problem solving in a systematic fashion.

CHAPTER III

Methodology

The following four steps of problem solving are suitable for adolescent use and understanding: According to Reikes-Ackerly:

> Everyone has problems at one time or another. Sometimes people don't try to solve their problems because they don't want to, don't know how, or perhaps are waiting for someone else to solve them. One way to get better at solving problems is through practice. There are certain skills you can learn to become better at solving problems. Here are four basic steps to follow: 1. Make sure you know what the problem is; 2. Ask yourself if you really care about solving it; 3. Think of different things you could to solve it; 4. Choose one thing to do and do it. Look back to see if it really helped (Reikes-Ackerly 1980:6).

The author emphasized to the target group that there will be all types of problems for them to cope with daily. Reikes-Ackerly stated:

> You may run into problems that are too big for you to handle or that are out of your control. When facing a complex problem it's difficult to know what you can do about the problem, if anything. But even with a very complex problem the way you decide to respond to it can make things better or worse for you and for other people (Reikes-Ackerly 1980:3).

The following method was used to instruct problem solving in stress management.

WEEK ONE

The problem solving-stress reduction program was explained to the T.A. students and why they were participating in weekly sessions. A pre test was given with one question; "Define stress."

Several definitions for stress were given. The group formulated one definition using all given examples. The target group memorized this definition of stress. Students brainstormed reasons for stressful situations in their lives. All responses were written on the board and copied by the students.

A folder was given to each student. All information and completed work concerning the problem solving-stress reduction program was placed in the personal folders and kept in the T.A. classroom.

A class motto relating to the stress program was chosen. A computer banner with the motto, "Stress Is DAAS", was displayed in the classroom.

"DAAS" is an acronym for Describing Actions Against Stress. The motto was written on the student's personal folder.

A post test was given at the end of week one. It contained one item; "Define stress."

WEEK TWO

The four basic steps in problem solving were written on the board for each student to copy. The four basic steps are: 1. Make sure you know what the problem is; 2. Ask yourself if you really care about solving it; 3. Think of different things you could do to solve it; 4. Choose one thing to do and do it. Look back to see if it really helped. Two imaginary stressful situations (Appendix F: 45) were used to practice the four problem solving steps. This practice was done orally and as a group. A test was given at the end of week two. It contained one item; "List the four basic steps in problem solving."

WEEK THREE

Examples of situations were introduced that adolescents typically encounter (Appendix G:47), (Sanders, Corinne, and Turner 1983:14-17). The T.A.

students brainstormed to decide what the problem was (step one in problem solving) for each given situation. Students distinguished between what can and cannot be changed. Notes were taken by the students and placed in their folders.

WEEK FOUR

Using the same problem from week three, the second step in the problem solving technique was used; Ask yourself if you really care about solving it. Students discussed the reasons for caring about solving the problem. Notes were taken on reasons and placed in folders.

WEEK FIVE

Using the same problem from week three, the third step in the problem solving technique was used; Think of different things you could do to solve it. Students listed ways to solve the problem. All reasonable ideas were listed on the board. The class chose the three best solutions to the problem. The three possible solutions were placed in the student's folder.

WEEK SIX

Using the same problem from week three, the fourth step in the problem solving technique was used; Choose one thing to do and do it. Look back to see if it really helped. As a group, students chose the best solutions from the three in week five and selected reasons why this was the better of the three.

WEEK SEVEN AND EIGHT

The teacher gave examples of several stressful situations to the T.A. group (Appendix G:47). The target students were divided into six groups of four students and one group of three students. Each group chose one situation from the examples and followed the four steps of problem solving to reach a solution. A group worksheet was completed by each group and handed in to the teacher (Appendix J:56). The success of the process was judged by the teacher using the criteria in the Teacher Evaluation Form.

WEEK NINE

Each student described a stressful situation, either real or imaginary, involving a teacher. The

four problem solving steps were followed by each member of the target group to solve the problem. Each student recorded the process on a student worksheet which was handed in to the teacher. The teacher evaluated each student worksheet subjectively using the criteria in the Teacher Evaluation Form.

WEEK TEN

Each student described a stressful situation, either real or imaginary, involving a friend. The four problem solving steps were followed by each member of the target group to solve the problem. The process was recorded on a student worksheet and handed in to the teacher. The teacher evaluated each student worksheet using the criteria on the Teacher Evaluation Form.

WEEK ELEVEN

Each student described a stressful situation, either real or imaginary, involving one or both parents. The four problem solving steps were followed by each member of the target group to solve the problem. The process was recorded on a

student worksheet and handed in to the teacher. The teacher evaluated each student worksheet using the criteria on the Teacher Evaluation Form.

WEEK TWELVE

Each student described a stressful situation, either real or imaginary. The four problem solving steps were followed by each member of the target group to solve the problem. The process was recorded on a student worksheet and handed in to the teacher. The teacher evaluated each student worksheet using the criteria from the Teacher Evaluation Form.

The Barksdale Stress Evaluation and the "My Stress Level" Test were given as a post test at the conclusion of week twelve.

CHAPTER IV

Results

Objective One

At the beginning of week one the students in the target group were administered a pre test to determine their knowledge of stress (Appendix D: 41). The test consisted of one question, "Define stress." Only two of the target students provided a definition which demonstrated understanding. The other 25 were familiar with the word "stress" but had no real understanding. After one week of instruction, 100 percent of the target students composed a correct definition of stress as measured by the administration of the post test (Appendix D: 41).

Objective Two

Results of a pre test administered to the target group at the beginning of week two (Appendix E:43) indicated that the target students did not know the four steps to problem solving. None of

the students were able to correctly list a logical series of actions to be taken in the problem solving process. At the conclusion of week two, after one week of instruction, 100 percent of the target students were able to list the four steps to problem solving as defined by Reikes-Ackerly (1980) in the correct order. Improvement was measured by administration of the post test (Appendix E:43) at the end of the second week.

Objective Three

Beginning in week three, the target group applied problem solving techniques to hypothetical, stress-related problems. The students examined problems as a class during weeks three through six. At the beginning of week seven the class was divided into smaller groups of three or four students each for problem solving exercises (Appendix G:47).

At the end of week eight each group submitted a group worksheet (Appendix J:56) suggesting a solution to a teacher chosen theoretical stressful situation (Appendix G:47). Worksheets were judged

subjectively by the teacher and recorded on the Teacher Evaluation Form (Appendix I:54). One hundred percent of the groups were evaluated by the teacher as "above average," that is, they had good conceptual grasp and no need for guidance in using the problem solving process.

During weeks nine through 12 the students worked individually on stressful situations involving teachers, friends, parents, and selves, respectively. Student worksheets were submitted to the teacher at the end of each week for subjective evaluation per criteria in the Teacher Evaluation Form. One hundred percent of the students in the target group were able to successfully apply Reikes-Ackerly's four problem solving steps at either the "average" or "above average" criteria level as described in the Teacher Evaluation Form.

Objective Four

Pre testing, using the Barksdale Stress Evaluation, indicated that 89 percent of the target group functioned under stress levels considered hazardous or harmful to physical and mental health.

This was supported by testing using the "My Stress Level" Test, which indicated that 88 percent of the target students were under medium to high levels of stress. The author intended to reduce the percentage of target students with a stress level of "hazardous or harmful to physical and mental health", as measured by the Barksdale Stress Evaluation, to 50 percent or less. Further the author intended to improve stress levels as measured by the "My Stress Level" Test to improve to zero percent of the target group functioning under high stress levels.

Post testing revealed that this objective was not met (Appendix K:58). Results from post testing using the Barksdale Stress Evaluation indicated that 78 percent of the target group were defined as having stress levels "hazardous or harmful to physical and mental health", as opposed to 89 percent on the pre test. Post testing using the "My Stress Level" Test indicated that 19 percent of the target group were functioning under high stress levels, as opposed to 15 percent on the pre test.

CHAPTER V

Recommendations

Although all stated objectives were not achieved, the concept of stress reduction through problem solving demonstrated merit and warrants further study.

The Barksdale Stress Evaluation is rated on a scale of from zero to 100, with a higher number representing a higher level of stress. Overall, 59 percent of the target students improved (lowered) their measurable stress. Thirty-seven percent demonstrated increased stress, and four percent (one student) showed no change. The real significance of the test results is in overall scoring. On average, each student in the target group showed a decrease of 2.85 points, resulting in an average lowering of stress per target student of seven percent.

The "My Stress Level" Test is evaluated on a scale of from zero to 15, again with higher numbers representing higher levels of stress. Ten target

students, or 37 percent, demonstrated lowered stress levels. Two students, or seven percent, remained at the same stress levels, and 15 students, or 55 percent, demonstrated increased stress. On average, each target student showed a tested increase of .68 points, for an average stress increase of eight percent.

The fact that the two evaluation tools demonstrated conflicting results is possibly explained by the fact that the Barksdale Stress Evaluation is biased toward long-term stress, while the "My Stress Level" Test is more a short-term measurement tool. Thus, both may well be valid. There appears to have been a reduction in stressors which are long-term, but an increase in short-term stress, probably attributable to school ending, final exams, the excitement of vacation, and other temporary stressors.

The concept of stress reduction through problem solving is an idea worthy of further consideration. The author will recommend that it be implemented in the target school as an

exploratory class for all sixth grade students, and that measurement tools be biased toward long-term as opposed to short-term stress measurement.

In addition, the author noted attitudinal changes among the students of the target group. Although stress was still a factor of everyday life, the target students were able to understand and tolerate stress more easily, regardless of their success in coping with it.

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Appendices

Appendix A

Sixth Grade Teacher's Survey

TEACHER SURVEY

When considering the following questions, please remember you are being asked to compare this age group (Sixth Grade) with age groups either above or below.

1. Have you taught grade levels other than your current position?
   yes no
2. Do you feel that your students have more social problems than at other levels?
   yes no
3. Do you feel that your current students function under higher levels of stress than at other grade levels?
   yes no
4. Do you feel as a teacher that it would be of value to relieve these stress levels?
   yes no
5. Do you feel this age group rebels against rules and authority?
   yes no
6. Do you feel there is excessive peer conflict at this age group?
   yes no
7. Do you feel that this age group is capable of setting long term goals?
   yes no
8. Do you feel that your students have more academic problems than at other levels?
   yes no

Appendix B

Barksdale Stress Evaluation

BARKSDALE STRESS EVALUATION

SCORING

0 = not at all true for me
1 = somewhat true OR true only part of the time
2 = fairly true OR true about half of the time
3 = mainly true OR true most of the time
4 = true all the time

SCORE		STRESS STATEMENTS
_____	1.	I feel inferior and inadequate compared with others.
_____	2.	I feel unworthy and guilty when critized and condemed.
_____	3.	I am easily frustrated.
_____	4.	I have a compulsive need to prove my worth and importance.
_____	5.	I am anxious about my future.
_____	6.	I have trouble making decisions and sticking to them.
_____	7.	I am afraid of death.
_____	8.	I am easily angered.
_____	9.	I resent people who don't do what they should.
_____	10.	I am badly upset by disappointed expectations.
_____	11.	I have a strong need to dominate and control others.
_____	12.	I blame myself for my mistakes and defeats.
_____	13.	I have a strong need for confirmation and agreement.
_____	14.	I habitually put off doing what I should do.
_____	15.	I have an intense need for approval and acceptance.
_____	16.	I am fearful of undertaking new endeavors.
_____	17.	I am sensitive to social pressures.
_____	18.	I have an intense fear of failure.
_____	19.	I have trouble admitting I am wrong.
_____	20.	I worry about my loved ones.
_____	21.	I am pressured by responsibility.
_____	22.	I am afraid to let others see the real me.
_____	23.	I have a compulsive need to meet others' expectations.
_____	24.	I have a compulsive need to win.
_____	25.	I am impatient and worry about getting things done in time.

_____ PERSONAL STRESS FACTOR (PSF) (sum of all scores)

WHAT YOUR PERSONAL STRESS FACTOR (PSF) MEANS:

5	Indicates an essentially stress-free life.
15	Definite handicap to emotional well-being.
25	Severe handicap to emotional and physical well-being.
50	Indicates serious emotional problems and a definite threat to your health.

Appendix C

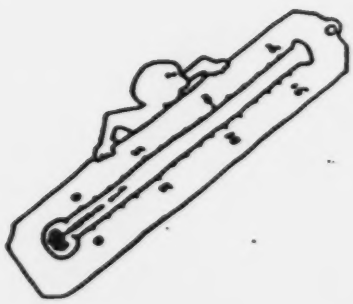
My Stress Level

B-8

MY STRESS LEVEL

Directions: Answer the questions below. If your answer is yes, put a check mark in the yes column. If your answer is no, put a check mark in the no column.

In the last month, have you	Yes	No
1. taken a test?		
2. had an argument or been in a fight?		
3. been late for something?		
4. had something exciting happen to you?		
5. felt lonely or depressed?		
6. taken a trip or gone to an amusement park?		
7. met someone new?		
8. done your chores?		
9. competed in a game or race?		
10. had too many things to do?		
11. had trouble with school work?		
12. failed to complete an assignment?		
13. helped plan a special party or event?		
14. had to be the first one to do something?		
15. been embarrassed?		
Total		



Scale

0-5	low level of stress
6-10	medium level of stress
11-15	high level of stress

1. Add the number of checks in the yes column and compare your score with the scale.
2. Then color in the stress meter to show your stress level.

Name _____ Date _____

Appendix D

Pre-and-Post Stress Test

Appendix D

Name _____
Date _____

Stress Test

1. Define stress.

Appendix E

Pre-and-Post Problem Solving Test

Appendix E

Name_____
Date_____

Problem Solving Steps

1. List the four steps to problem solving.

Appendix F

Stress-Related Situations

Juvenile Problems and Law

SUGGESTED SITUATIONS FOR PROBLEM SOLVING PRACTICE

Situation G: School

"I'm never going back to school. Just because I'm the biggest in my class that teacher is always picking on me. She asks me to carry books, move furniture, or carry movie equipment. I know I'm not a great student, but she takes advantage of me. I'm never carrying anything else, ever! I'm not going back to that class."

SITUATION H: Drugs

"I used to take drugs with my friends. I got messed up bad a few times and decided not to use any more drugs. I still like my friends though, but they don't like me because they say I'm a goody-goody. I don't know what to do."

SITUATION I: My Guardian

"I'm fourteen. I hate my grandfather who is my guardian. He makes me do all the housework and cooking. For Christmas he threw me a pack of gum and said, "Merry Christmas." That was my present. I want to run away but I'm kind of afraid."

Appendix G

Stress-Related Situations

Coping: A Guide to Stress Management

Analyze the following stressful situations and think of a possible solution to each problem. With your teacher and classmates, discuss the situations and various solutions to each problem.

Situation A: Boredom

It is a stormy Saturday. You are home and unable to talk with your friends because telephone and electrical wires will be out of use for several hours. The TV and radio are also out of order. Tell how you would go about enjoying this unusual Saturday afternoon.

Situation B: Loss of a Friend

Your best friend suddenly begins to ignore you and starts spending time with someone else. You thought the situation would be temporary, but you realize your friend no longer values your friendship. How would you cope with this situation?

Situation C: Parents Fighting

You are awakened from a deep sleep because your parents are arguing again. You stay awake for hours after the fighting has stopped. Your concern for your parents and your lack of sleep has greatly affected your school work. How would you cope with this problem?

SOLUTIONS

Appendix G

Coping is often a matter of choosing alternatives for handling a situation that has not turned out as you expected or wished.

A. In the following situations, give three possible alternatives for coping with each.

B. Star (*) the alternative you would use to cope with each situation.

Situation A: Birthday Blues

You have invited several friends over for a party to celebrate your birthday. On the morning of the party, however, your mom wakes up very, very ill with the flu. What could you do?

Situation B: Foreign Foods

You are invited to a new friend's house for dinner. When you sit down with the family to eat, you discover the entire meal consists of foods you *absolutely* cannot stand! What could you do?

Situation C: Baseball Dilemma

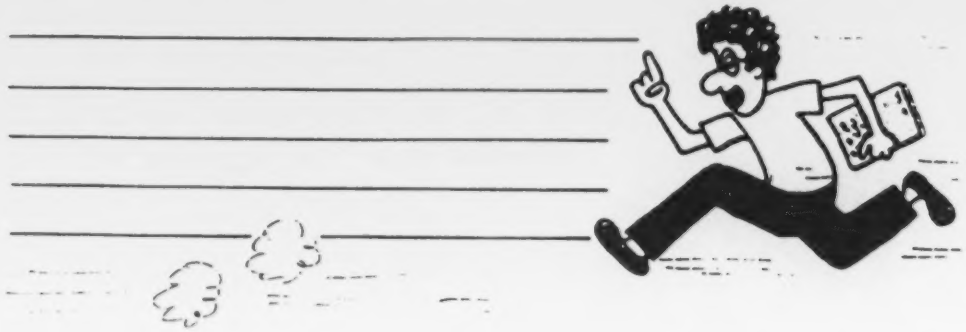
Your class has planned a picnic. One of the activities being planned is a softball game. There are just enough members to form two teams. You are absolutely awful at softball. What could you do?

Situation D: Keep Your Head

You finally gave in to your parent's pleading and got a haircut. You dozed off in the barber's chair and didn't realize what he was doing. Your hair is a mess, and you know you'll be teased when you show up at school tomorrow. What could you do?

Situation E: Late For Dinner

You stop to chat with a friend after school and lose track of the time. As a result, you miss the bus you usually take home. What are three courses of action you could take?



Situation D: Separation or Divorce

Your once happy, secure family is now faced with the major problem of splitting apart. You love your mother and your father, but they believe they no longer love each other. They are planning a legal separation — maybe a divorce. How do you plan to cope with this situation?

Situation E: Adjusting to Newness

You move to a new home on a new street in a new town. You attend a new school where you must make new friends. What are some ways you could cope with all this newness?

Situation F: Sibling Rivalry

You seem to be constantly fighting with your brother (or sister). You have been quarreling so much, fighting has become a part of your daily routine. Can you suggest three possible ways to change this pattern?

What are some possible consequences in each of the above situations if you do *not* cope with the problems in a positive way?

Appendix H

Student Worksheet

Name _____

Date _____

STUDENT WORKSHEET

Describe the situation that is causing stress.

_____

_____

_____

1. Describe the problem.

_____

_____

_____

2. Ask yourself if you really care about solving it.

_____

_____

_____

3. Think of different things you could do to solve it.

_____

_____

_____

4. Choose one thing to do and do it. Look back to see if it really helped.

_____

_____

_____

Appendix I

Teacher Evaluation Form

Teacher Evaluation Form

Student's Name:
Name of Project:
Date:

_____ "Above Average" Total grasp of concepts and procedures. Can use techniques with no guidance to solve a variety of problems.

_____ "Average" Basic understanding of concepts. Can apply ideas to a variety of situations with minimal supervision, can see problems through, with guidance, to logical conclusion.

_____ "Below Average" Do not understand concepts at all. Cannot apply ideas to a variety of situations, or do not understand logical sequence of events.

Appendix J

Group Worksheet Form

Group Name _____

Date _____

GROUP WORKSHEET

Describe the situation that is causing stress.

_____

_____

_____

1. Describe the problem.

_____

_____

_____

2. Ask yourself if you really care about solving it.

_____

_____

_____

3. Think of different things you could do to solve it.

_____

_____

_____

4. Choose one thing to do and do it. Look back to see if it really helped.

_____

_____

_____

Appendix K

Pre-and-Post Implementation Scores

Pre-and-Post Implementation Scores

Student	Barksdale Evaluation		"My Stress Level"	
	Pre	Post	Pre	Post
A	47	54	8	10
B	29	45	6	10
C	32	31	14	11
D	41	45	4	10
E	43	37	6	9
F	35	29	5	6
G	62	56	10	8
H	36	36	5	5
I	59	40	8	7
J	60	55	13	7
K	25	31	12	14
L	49	55	9	11
M	66	64	6	8
N	33	45	8	8
O	45	32	11	5
P	84	72	10	12
Q	36	27	6	6
R	26	23	9	9
S	17	5	9	8
T	7	6	7	5
U	37	35	8	10
V	22	23	3	5
W	44	15	6	8
X	66	49	9	8
Y	36	52	10	12
Z	37	51	9	8
AA	39	23	8	9